

The Examiner has rejected claims 22-29, 32-34, and 41-42 under 35 U.S.C. § 112, first paragraph, as allegedly lacking enablement over the full scope of the claims. (Paper No. 9, at 2.) Applicants do not accept or agree with the Examiner's analysis. However, to expedite prosecution of the present application, the claims are now directed to mouse cells, to methods carried out in mouse cells, and to DNA constructs for targeting mouse cells. The Examiner has conceded that this subject matter is supported and enabled by the specification (Paper No. 9, at 3). Therefore, Applicants request that the rejection under 35 U.S.C. § 112, first paragraph be withdrawn.

Applicants believe that the claims are now in condition for allowance and request early notification of the same.

Applicants believe that any extension of time required to file this Amendment and Response is accounted for by the accompanying Petition for Extension of Time under 37 C.F.R. 1.136(a). However, if Applicants are in error, please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,  
GARRETT & DUNNER, L.L.P.



By: Ref No. 43,008 for -

Leslie A. McDonell  
Reg. No. 34,872

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**APPENDIX TO AMENDMENT FILED SEPTEMBER 13, 2001**

**Version with Markings to Show Changes Made**

Amendments to the Claims

22. (Amended) A method of inserting a heterologous gene coding sequence into an endogenous gene in a mouse [eukaryotic cellular host] cell genome and expressing said heterologous gene coding sequence, comprising the step of transforming the mouse [host] cell with a random gene trap vector comprising a DNA construct, wherein the DNA construct (k) lacks a promoter, and (ii) comprises the sequence:

5' X-A-P-B-Q-C-Y 3'

in which

- X comprises a splice acceptor sequence;
- Y comprises a polyadenylation signal;
- P is an internal ribosome entry site (IRES);
- Q is the heterologous gene sequence, including a translation start

codon; and

A, B and C are, separately, optional linker sequences.

28. (Amended) A mouse cell comprising a heterologous gene coding sequence inserted by the method of Claim 22.

29. (Amended) A descendant of the mouse [a] cell according to Claim 28, wherein the descendant has inherited the inserted heterologous gene coding sequence.

LAW OFFICES

FINNEGAN, HENDERSON,  
FARABOW, GARRETT,  
& DUNNER, L.L.P.  
1300 I STREET, N.W.  
WASHINGTON, DC 20005  
202-408-4000

32. (Amended) A DNA construct for randomly inserting a heterologous gene sequence into a mouse cell [host] genome, said construct lacking a promoter and comprising the sequence;

5' X-A-P-B-Q-C-Y 3'

in which

X comprises a splice acceptor sequence;

Y comprises a polyadenylation signal;

P is an internal ribosome entry site (IRES);

Q is the heterologous gene sequence, including a translation start codon; and

A, B, and C are, separately, optional linker sequences.

34. (Amended) A DNA construct according to Claim 32 in which the heterologous gene sequence additionally codes for a selectable marker to facilitate selection of mouse cells containing a heterologous gene that has been inserted into an endogenous gene.